

Olivine- Thermometers

Reference	Name in ThermoBar		Pressure-dependent?	H ₂ O-dependent?
Olivine-Liquid thermometry. Function “calculate_ol_liq_temp”				
Putirka (2008)	T_Put2008_eq19		Yes	No
	T_Put2008_eq21		Yes	Yes
	T_Put2008_eq22		Yes	Yes
Beattie (1993)	T_Beatt93_ol		Yes	No
	T_Beatt93_ol_HerzCorr		Yes	No
Sisson and Grove (1992)	T_Sisson1992		Yes	No
Pu et al. (2017)	T_Pu2017		No	No
Pu et al. (2021)	T_Pu2021		Yes	No
Olivine-Spinel thermometry. Function “calculate_ol_sp_temp”				
Coogan et al. (2014)	T_Coogan2014		No	No
Wan et al. (2008)	T_Wan2008		No	No

Feldspar Thermometers, Barometers and Hygrometers

Reference	Name in ThermoBar	Temperature-dependent?	Pressure-dependent?	H ₂ O-dependent?
Plagioclase-Liquid thermometry. Function “calculate_fspar_liq_temp”				
Putirka (2008)	T_Put2008_eq23		Yes	Yes
	T_Put2008_eq24a		Yes	Yes
Plagioclase-Liquid Barometry. Function “calculate_fspar_liq_press”				
Putirka (2008)	P_Put2008_eq25	Yes		No
Alkali Feldspar-Liquid thermometry. Function “calculate_fspar_liq_temp”				
Putirka (2008)	T_Put2008_eq24b		Yes	No
Plagioclase-Alkali Feldspar thermometry. Function “calculate_plag_kspar_temp”				
Putirka (2008)	T_Put2008_eq27a		Yes	No
	T_Put2008_eq27b		Yes	No
	T_Put_Global_2Fspar		Yes	No
Plagioclase-Alkali Feldspar thermometry. Function “calculate_plag_kspar_temp_matching”				
Putirka (2008)	H_Put2008_eq25b	Yes	Yes	
Putirka (2005)	H_Put2005_eqH	Yes	No	
Waters and Lange (2015)	H_Waters2015	Yes	Yes	
Other Functions				
<u>Iterative solving of pressure and temperature:</u> calculate_fspar_liq_press_temp: Iteratively solves P and T for fspar-liq pairs using an equation for pressure, and an equation for temperature <u>Matching all possible pairs</u> calculate_plag_kspar_temp_matching: Calculates P and T for all possible plag-kspar pairs (with user-selected options for equilibrium criteria)				

